

AMENDMENTS TO CLAIMS

Please amend claim 21, all claims are shown below.

1. (Previously Presented): An implant sized to be inserted between adjacent vertebrae comprising:
 - a first piece having a first socket;
 - a second piece having a second socket; and
 - a crossbar member comprising:
 - a first beam; and
 - a second beam, wherein the length of the second beam is configured transversely to the length of the first beam;wherein the crossbar is at least partially received in the first socket and the second socket, wherein at least the first piece does not fuse to the crossbar, wherein at least the first piece is capable of pivoting about the crossbar member to accommodate at least one of flexion, extension and lateral bending.
2. (Original): The implant of claim 1 wherein the crossbar member has first and second bars that are perpendicular.
3. (Previously Presented): The implant of claim 1 wherein the crossbar member has a first bar that is mounted above a second bar.
4. (Original): The implant of claim 1 wherein the crossbar member can pivot on itself.

5. (Original): The implant of claim 1 wherein one of the first and second socket is sloped to allow a rocking motion.
6. (Original): The implant of claim 1 wherein the crossbar forms a cross.
7. (Cancelled)
8. (Cancelled)
9. (Original): The implant of claim 1 wherein the crossbar has a first beam and a second beam and further wherein the first beam of the crossbar crosses the second beam of the crossbar at a midpoint along the second beam.
10. (Original): The implant of claim 9 wherein the first beam of the crossbar and the second beam of the crossbar are formed integrally.
11. (Original): The implant of claim 9 wherein the first beam of the crossbar and the second beam of the crossbar are adhered to each other.
12. (Original): The implant of claim 9 wherein the first beam of the crossbar abuts the second beam of the crossbar.

13. (Original): The implant of claim 9 wherein the first beam of the crossbar is positioned at least partially above the second beam of the crossbar.

14. (Original): The implant of claim 1 wherein the crossbar has a first beam and a second beam and further wherein the first beam of the crossbar crosses the second beam of the crossbar between a midpoint of the second beam and an end point of the second beam.

15. (Original): The implant of claim 1 wherein the first piece has a first surface and a second surface wherein the first socket is located on the first surface and a keel extends from the second surface.

16. (Original): The implant of claim 15 wherein the keel is oriented in a first plane and the first socket is oriented in a second plane, and further wherein the first plane and the second plane are perpendicular to each other.

17. (Cancelled)

18. (Previously Presented): The implant of claim 1 wherein the second piece has a first surface and a second surface wherein the second socket is located on the first surface and a keel extends from the second surface.

19. (Original): The implant of claim 18 wherein the keel is oriented in a first plane and the first socket is oriented in a second plane, and further wherein the first plane and the second plane are perpendicular to each other.

20. (Cancelled)

21. (Currently amended): An implant adapted to be placed between two vertebral bodies comprising:

an upper implant further comprising, a first surface that is adapted to contact a bottom surface of an upper vertebral body, and a second surface having a first concave socket;

a lower implant further comprising, a first surface that is adapted to contact an upper surface of a lower vertebral body, and a second surface having a second concave socket; and

a crossbar member with a first beam that is received in the first concave socket of the upper implant and a second beam that is received in the second concave socket of the lower implant, wherein the length of the second beam is configured transversely to the length of the first beam, wherein at least one of the upper implant first piece and the lower implant second piece does not fuse to the crossbar, wherein at least one of the upper and lower implant is capable of pivoting about the crossbar.

22. (Cancelled)

23. (Previously Presented): The implant of claim 21 wherein the second concave socket in the lower implant is oriented to lie in a plane perpendicular to a sagittal plane of a patient.

24. (Cancelled).

25. (Cancelled).

26. (Previously Presented): An implant adapted to be mounted between adjacent vertebral bodies comprising:

an upper plate having a first surface that is adapted to engage a lower surface of an upper vertebral body, and a second surface with a socket;

a lower plate having a first surface that is adapted to engage an upper surface of a lower vertebral body, and a second surface with a socket;

a crossbar member having a first beam that is mounted at least partially above and across a second beam; and

wherein the first beam is positioned in one of the socket of the upper plate and the socket of the lower plate, and the second beam is positioned in the other of the socket of the upper plate and the socket of the lower plate, wherein the length of the second beam is configured transversely to the length of the first beam, wherein at least one of the first piece and the second piece does not fuse to the crossbar, wherein the implant remains able to accommodate at least one of flexion, extension and lateral bending.

27. (Original): The implant of claim 26 wherein one of the socket of the upper plate and the socket of the lower plate is oriented in a plane parallel to a sagittal plane of a patient and the other of the socket of the upper plate and the socket of the lower plate is oriented in a plane that is perpendicular to a sagittal plane of a patient.

28. (Original): The implant of claim 26 including a first keel extending from the first surface of the upper plate and adapted to engage the upper vertebral body, and a second keel extending from the first surface of the lower plate and adapted to engage the lower vertebral body.

29. (Previously Presented): The implant of claim 26 wherein the second surface of the upper plate and the second surface of the lower plate slope away from each other.

30. (Original): The implant of claim 26 wherein at least one of the second surface of the upper plate and the second surface of the lower plate has a portion that slopes away from the socket in order to allow for a greater freedom of motion between the upper and the lower plates.

31. (Original): The implant of claim 26 wherein at least one of the second surface of the upper plate and the second surface of the lower plate has a portion that slopes away from the socket.

32. (Original): The implant of claim 26 wherein a fit between the crossbar and the sockets of the upper and lower plates is loose in order to allow for a twisting motion between the upper and the lower plates.

33. (Previously Presented): The implant of claim 26 wherein the upper plate can rotate on one of the beams of the crossbar and the lower plate can rotate on the other of the beams of the crossbar.

34. (Previously Presented): The implant of claim 26 wherein the upper plate can rotate about a first axis on one of the beams of the crossbar and the lower plate can rotate about a second axis that is perpendicular to the first axis on the other of the beams of the crossbar.

35. (Previously Presented): An implant adapted to be positioned between vertebral bodies comprising:

a first member with a first socket;

a second member with a second socket;

a spacer received in the first socket and the second socket with the spacer spacing the first member from the second member and allowing the first member to rotate about the spacer about a first axis and allowing the second member to rotate about the spacer about a second axis that is not parallel to the first axis such that the implant allows continuous selective movement of the vertebral bodies, wherein the rotation about the first axis is not limited to rotation in only one plane, wherein at least one of the first member and the second member does not fuse to the spacer.

36. (Previously Presented): An implant to be positioned between vertebral bodies to allow continuous selective movement of the vertebral bodies, the implant comprising:

a first member adapted to engage a first vertebral body;

a second member adapted to engage a second vertebral body;

a spacer that spaces the first member from the second member;

the spacer having a first axis about which the first member can rotate and a second axis about which the second member can rotate, with the first axis and the second axis not being parallel, wherein the rotation about the first axis is not limited to rotation in only one plane, wherein at least one of the first member and the second member does not fuse to the spacer.

37. (Previously Presented): The implant of claim 21 wherein the first concave socket in the upper implant is oriented to lie in a plane perpendicular to a sagittal plane of a patient.

38. (Previously Presented): The implant of claim 21 wherein the second concave socket in the lower implant is oriented to lie in a plane parallel to a sagittal plane of a patient.

39. (Previously Presented): An implant adapted to be positioned between vertebral bodies comprising:

a first member having a first inner surface;

a second member having a second inner surface facing the first inner surface; and

a spacer to accommodate bending of at least one vertebral body, the spacer including a first spacer member extending between lateral sides of the first and second members, and a

second spacer member extending between an anterior and a posterior side of the first and second members, wherein the bending between the first member and the spacer is not limited to bending in only one plane, wherein at least one of the first member and the second member does not fuse to the spacer.

40. (Currently Amended): An implant comprising:

a first member adapted to attach to a first vertebral body;

a second member adapted to attached to a second vertebral body; and

a crossbar spacer positioned between the first member and the second member, the crossbar spacer adapted to allow at least one of flexion, lateral, and extension bending of at least one of the first vertebral body and the second vertebral body, wherein the flexion, lateral, and extension bending between the first member and the spacer is not limited to flexion, lateral, and extension bending in only one plane, wherein the crossbar does not fuse to at least one of the first member and the second member.

41. (Previously Presented): An implant sized to be inserted between adjacent vertebrae comprising:

a first piece having a first socket;

a second piece having a second socket; and

a crossbar member that is at least partially received in the first socket and the second socket, wherein after an implant is inserted and the patient has healed at least the first piece remains capable of pivoting about the crossbar member to accommodate at least one of flexion,

extension and lateral bending; wherein at least one of the first piece and the second piece are moveable about the crossbar member to allow a twisting motion of said piece.

42. (Previously Presented): An implant adapted to be placed between two vertebral bodies comprising:

an upper implant further comprising, a first surface that is adapted to contact a bottom surface of an upper vertebral body, and a second surface having a first concave socket;

a lower implant further comprising, a first surface that is adapted to contact an upper surface of a lower vertebral body, and a second surface having a second concave socket; and

a crossbar member with a first beam that is received in the first concave socket of the upper implant and a second beam that is received in the second concave socket of the lower implant, wherein after an implant is inserted and the patient has healed at least one of the upper and lower implant remains capable of pivoting about the crossbar; wherein at least one of the upper implant and the lower implant are moveable about the crossbar member to allow a twisting motion of said piece.

43. (Previously Presented): An implant adapted to be placed between two vertebral bodies comprising:

an upper implant further comprising, a first surface that is adapted to contact a bottom surface of an upper vertebral body, and a second surface having a first concave socket;

a lower implant further comprising, a first surface that is adapted to contact an upper surface of a lower vertebral body, and a second surface having a second concave socket; and

a crossbar member with a first beam that is received in the first concave socket of the upper implant and a second beam that is received in the second concave socket of the lower implant, wherein after an implant is inserted and the patient has healed at least one of the upper and lower implant remains capable of pivoting about the crossbar; wherein the first concave socket in the upper implant is oriented to lie in a plane perpendicular to a sagittal plane of a patient.

44. (Previously Presented): An implant adapted to be placed between two vertebral bodies comprising:

an upper implant further comprising, a first surface that is adapted to contact a bottom surface of an upper vertebral body, and a second surface having a first concave socket;

a lower implant further comprising, a first surface that is adapted to contact an upper surface of a lower vertebral body, and a second surface having a second concave socket; and

a crossbar member with a first beam that is received in the first concave socket of the upper implant and a second beam that is received in the second concave socket of the lower implant, wherein after an implant is inserted and the patient has healed at least one of the upper and lower implant remains capable of pivoting about the crossbar; wherein the first concave socket in the upper implant is oriented to lie in a plane parallel to a sagittal plane of a patient.